ABSTRACT

The present invention provides an inexpensive metallic material for interconnects of solid-oxide fuel cells, a fuel cell using the metallic material, and a method for producing the metallic material having excellent oxidation resistance and spalling resistance of an oxide layer, high electrical conductivity, and a small difference in thermal expansion from an electrolyte. Specifically, 0.20 percent by mass or less of C, 0.02 to 1.0 percent by mass of Si, 2.0 percent by mass or less of Mn, 10 to 40 percent by mass of Cr, 0.03 to 5.0 percent by mass of Mo, 0.1 to 3.0 percent by mass of Nb, and at least one element selected from the group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Zr, and Hf in a total of 1.0 percent by mass or less are added so as to satisfy $0.1 \leq Mo/Nb \leq 30$, for decreasing the growth rate of the oxide layer and improving the spalling resistance.